

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed October 1, 2003. Upon entry of the amendments in this response, claims 1 – 9, 13 – 14 and 16 – 18 remain pending. In particular, Applicants have amended claims 1 – 3, 8, 9, 13, 14 and 18, and have canceled claims 10 – 12 and 15 without prejudice, waiver, or disclaimer. Applicants have canceled claims 10 – 12 and 15 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Rejections Under 35 U.S.C. §112

The Office Action indicates that claim 12 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully assert that claim 12 has been canceled and, therefore, the rejection has been rendered moot.

Rejections under 35 U.S.C. §102

The Office Action indicates that claims 1 – 18 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Ahearn*. As set forth above, Applicants have canceled claims 10 – 12 and 15 and respectfully assert that the rejection as to these claims has been rendered moot. With respect to the remaining claims, Applicants respectfully traverse the rejection.

As an initial matter, Applicants respectfully assert that *Ahearn* has been cited in the Office Action for various teachings, including an open shortest path first (OSPF)

functionality. This OSPF functionality has generally been alleged to anticipate those aspects of Applicants' invention that involve determining a shortest probable path between a start node and an end node. However, Applicants respectfully note that OSPF functionality is a router-based protocol. That is, OSPF functionality is something that routers along a path can perform for transferring routing information between nodes. Notably, OSPF functionality can include various factors, such as transferring data to an adjacent node based on lowest cost, as opposed to fewest number of hops. Note, also that *Ahearn* involves depicting the OSPF area topology, which includes numerous routers and numerous paths. The shortest path between nodes in this OSPF area topology is not determined by *Ahearn*. Therefore, Applicants respectfully assert that the reliance on the OSPF functionality of *Ahearn* has been misplaced.

Turning now the claims, claim 1, as amended, recites:

1. A method for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the connectors and the end node corresponding to another of the connectors, said method comprising:
 - receiving, from an operator, information corresponding to the start node and the end node;
 - receiving, from the operator, information corresponding to a type of connector of interest; and
 - in response to the information received, automatically determining a shortest path between the start node and the end node based upon the type of connector of interest and irrespective of a routing or layer 2 protocol being used by a connector.***(Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 1, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least "in response to the information received, automatically determining a shortest path between the start node and the end node based upon the type of

connector of interest and irrespective of a routing protocol being used by a connector.”

Therefore, Applicants respectfully assert that claim 1 is in condition for allowance.

Since claims 2 - 8 incorporate all the features/limitations of claim 1, Applicants respectfully assert that these claims also are in condition for allowance. Additionally, these claims recite other features/limitations that can serve as an independent basis of patentability.

By way of example, claim 2 recites:

2. The method of claim 1, wherein, in determining a shortest path between the start node and the end node, a path with a lowest hop count between the start node and the end node is designated as the shortest path.

Applicants respectfully assert that the features/limitations recited in claim 2 are not taught or reasonably suggested by the cited references, either alone in combination.

Therefore, Applicants respectfully assert that at least claim 2 is in condition for allowance.

Claim 9 recites:

9. A system for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the connectors and the end node corresponding to another of the connectors, said system comprising:

a processor;

a discovery mechanism associated with said processor, said discovery mechanism configured to generate and store topology data specifying connectors and segments of a communication network; and

a layout mechanism associated with said processor and interfaced with said discovery mechanism, said layout mechanism configured to receive said topology data from said discovery mechanism, said layout mechanism configured to drive a display based upon said topology data,

said discovery mechanism being configured to determine a shortest probable path between a start node and an end node based upon said topology data, said shortest probable path being defined by a path with a lowest hop count between the start node and the end node and without reference to routing protocols of connectors located along the path.
(Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 9, because at least the features/limitations emphasized above are not taught or otherwise

disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least “said discovery mechanism being configured to determine a shortest probable path between a start node and an end node based upon said topology data, said shortest probable path being defined by a path with a lowest hop count between the start node and the end node and without reference to routing protocols of connectors located along the path.” Therefore, Applicants respectfully assert that claim 9 is in condition for allowance.

Claim 14 recites:

14. A computer readable medium having a computer program for determining paths between a start node and an end node of a communication network, the communication network being formed of sub-networks, the sub-networks having connectors and segments, the segments interconnecting various ones of the connectors, the start node corresponding to one of the connectors and the end node corresponding to another of the connectors, said computer readable medium comprising:

logic configured to receive information corresponding to the start node and the end node;

logic configured to receive information corresponding to a type of connector of interest; and

logic configured to determine, automatically and in response to the information received, a shortest probable path between the start node and the end node based upon the type of connector of interest and without regard to routing or layer 2 protocols of connectors located along the path.
(Emphasis Added).

Applicants respectfully assert that *Ahearn* is legally deficient for anticipating claim 14, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Ahearn*. Specifically, Applicants respectfully assert that *Ahearn* does not teach or otherwise disclose at least “logic configured to determine, automatically and in response to the information received, a shortest probable path between the start node and the end node based upon the type of connector of interest and without regard to routing protocols of connectors located along the path.” Therefore, Applicants respectfully assert that claim 14 is in condition for allowance.

Since claims 16 - 18 incorporate all the features/limitations of claim 14, Applicants respectfully assert that these claims also are in condition for allowance.

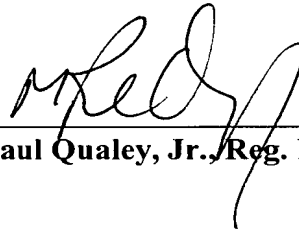
Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1 – 9, 13 – 14 and 16 – 18 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on 11/4/03.


Signature